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# Security Determinants in the Adoption of Big Data Solutions

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# SECURITY DETERMINANTS IN THE ADOPTION OF BIG DATA SOLUTIONS

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## *Abstract*

*As in any new technology adoption in organizations, big data solutions (BDS) also presents some security threat and challenges, especially due to the characteristics of big data itself - the volume, velocity and variety of data. Even though many security considerations associated to the adoption of big data solutions have been publicized, it remains unclear whether these publicized facts have any actual impact on the adoption of the solutions. Hence, it is the intent of this research-in-progress to examine the security determinants by focusing on the influence that various technological factors in security, organizational security view and security related environmental factors have on big data solutions adoption. One technology adoption framework, the TOE (technological-organizational-environmental) framework is adopted as the main conceptual research framework. This research will be conducted using a Sequential Explanatory Mixed Method approach. Quantitative method will be used for the first part of the research, specifically using an online questionnaire survey. The result of this first quantitative process will then be further explored and complemented with a case study. Results generated from both quantitative and qualitative phases will then be triangulated and a cross-study synthesis will be conducted to form the final result and discussion.*

*Keywords: Big Data Adoption, Security and Privacy, TOE Framework, Mixed Method Approach*